Midair and Near-Midair Scenarios

ur Naval Safety Center air-traffic-control analyst reviewed several scenarios from the WESS database. The following edited versions give a synopsis, provide causal factors, and share comments from leadership. The tenets of crew resource management can be found in each case.

Scenario No. 1

Aircraft (call sign LB259) was in the emergency-landing pattern (ELP) at an outlying field (OLF) and was approaching low-key for runway 22. The pilot was doing a practice-precautionary-emergency landing (PPEL) when he heard AA168 call a three-mile initial for runway 22. LB259 did not have AA168 in sight, so LB259 made a radio call on common frequency, stating he was approaching low-key. The runway duty officer (RDO) then called AA168, stating LB259 was approaching low-key. Then RK259 passed about 50 feet below and 100 feet behind BB168. During this incident, four aircraft were in the pattern and two were inbound. The RDO had difficulty dividing his attention between the PPEL, break, pattern traffic, and LAPL(p) on final, not to mention all the radio calls.

Human performance causal factors:

- RDO was not monitoring both landing patterns.
- RDO was inside the RDO cart and could not see both landing patterns because of visibility constraints.
- RDO assumed both aircraft had deconflicted with themselves, and he continued to monitor the traffic pattern.

Recommendations:

The RDO should be required to advise the incoming break aircraft of traffic in the ELP. Without this notification, an incoming break aircraft never may know an aircraft is in the ELP.

Commander's comments:

Operations at outlying fields can be very demanding for all, especially when they are at or near saturation. The recommendations not only will help to prevent a midair collision but also will aid in increasing the overall safety at the OLF. Operating at the OLF takes 100-percent concentration by all participants. The role of the RDO is something not to take lightly; RDOs may be the ones who prevent the next midair collision.

Scenario No. 2

A flight of two FA-18s were flying a precision-approach-radar (PAR) approach to runway 23R while field-carrier-landing-practice operations (FCLPs) were in progress to runway 23L. SOP is not to allow ground-controlled approaches (GCAs) to the same runway where field-carrier-landing practices (FCLPs) are being flown. The two FA-18s originally had requested a section PAR approach, which was coordinated between the arrival and final controller, using a scratchpad on the radar scope.

While on base leg, the flight of two FA-18s changed their request with the arrival controller to split-the-duals (land on runways 23 left and right). The arrival controller responded, "On request."

The arrival controller did not change the scratchpad entry on the scope, nor did he verbally coordinate the request to split-the-duals to the final controller. The final controller was monitoring button 12 and heard the request to split-the-duals; however, he didn't relay that request to the tower. Had the final controller done so, tower immediately would have denied the request and reminded the final controller FCLPs were in progress. At three miles, the tower controller issued the clearance for the flight of two FA-18s for what they thought would be a section approach for runway 23R. When the final controller cleared the flight, they cleared them for runways 23 left and right. The FCLP aircraft at the 90 and GCA FA-18 at two miles saw the potential collision and waved off.

Human performance causal factors:

- The final controller believed that the arrival controller or the supervisors were going to coordinate the nonstandard operation.
 - Loss of situational awareness.
- Arrival controller failed to deny the request to split-the-duals, knowing FCLPs were in progress on runway 23L

Commander's comments:

An essential element of CRM is communication, which in this case broke down. The controllers began to assume coordination was taking place, rather than verifying it. The aircrew kept a bad situation from getting worse. Our controllers must be vigilant in following their SOP and maintaining good coordination with multiple aircraft operating under dual-runway ops. Communication is the key to reducing our risk.